

REMARKS

Claims 1-8 and 10-17 are pending in the above-identified application. Claims 19-28 are withdrawn from consideration as being directed to non-elected inventions. In the Office Action dated July 5, 2006, the Examiner made the following disposition:

- A.) Rejected claims 1-3, 8-12[sic], and 17 under 35 U.S.C. §102(e) as allegedly being anticipated by *Carey, et al.*
- B.) Rejected claims 4-7 and 13-16 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Carey, et al.*

Applicant respectfully traverses the rejections and addresses the Examiner's disposition below. In the Office Action Summary, the Examiner checked Box 9 indicating that the specification is objected to, however, the Examiner has not identified why the specification is objected to. Applicant submits that Box 9 was checked in error.

Claims 1 and 10 have been amended as discussed below. Claims 4, 8, 13 ,and 17 have been amended to correct informalities to reflect the changes to claims 1 and 10. Claims 5, 7, 14, and 16 have been canceled.

A.) Rejection of claims 1-3, 8-12[sic], and 17 under 35 U.S.C. §102(e) as allegedly being anticipated by *Carey, et al.*:

Applicant respectfully disagrees with the rejection.

Applicant respectfully notes the Examiner mistakenly rejected claim 9, which has been canceled.

Referring to Applicant's Figure 1 as an illustrative example, claims 1 and 10, each as amended, each claim subject matter relating to a magnetoresistance-effect element comprising a substrate 2, a primary-coat layer 3 formed directly on a surface of the substrate 2, an anti-ferromagnetic layer 4 formed directly on a surface of the primary-coat layer 3 that is opposite the substrate 2, a multilayer pinned layer 13 formed directly on a surface of the anti-ferromagnetic layer 4 that is opposite the primary-coat layer 3, a nonmagnetic metal layer 8 formed directly on a surface of the multilayer pinned layer 13 that is opposite the anti-ferromagnetic layer 4, a magnetism-sensing section 9 the electric resistance of which changes in accordance with an external magnetic field formed directly on a surface of the nonmagnetic metal layer 8 that is opposite the multilayer pinned layer 13, a low-resistance metal layer 10 formed directly on a surface of the magnetism-sensing section 9 that is opposite the nonmagnetic metal layer 8, an oxide layer 11 provided on that surface of the low-resistance metal layer 10 which faces away from the magnetism-sensing section 9, and a non-magnetic protective layer 12 provided on that surface of the oxide layer 11 which faces away from the low-resistance metal layer 10. A total thickness of the low-resistance metal layer 10 and oxide layer ranges 11 from 0.5 nm to 1.5 nm.

This is clearly unlike *Carey* which fails to disclose or suggest Applicant's claimed layer structure. To begin with, *Carey* fails to disclose or suggest a primary-coat layer formed directly on a surface of a substrate. Therefore, *Carey* also fails to disclose or suggest an anti-

ferromagnetic layer formed directly on a surface of the primary-coat layer that is opposite the substrate. Further, *Carey* fails to disclose or suggest a multilayer pinned layer formed directly on a surface of an anti-ferromagnetic layer that is opposite a primary-coat layer. Also, *Carey* fails to disclose or suggest a nonmagnetic metal layer formed directly on a surface of a multilayer pinned layer that is opposite an anti-ferromagnetic layer. Further, *Carey* fails to disclose or suggest a magnetism-sensing section the electric resistance of which changes in accordance with an external magnetic field formed directly on a surface of a nonmagnetic metal layer that is opposite a multilayer pinned layer. Further, *Carey* fails to disclose or suggest the following claimed layers that are stacked on the above-described layers: a low-resistance metal layer formed directly on a surface of the magnetism-sensing section that is opposite the nonmagnetic metal layer, an oxide layer provided on that surface of the low-resistance metal layer which faces away from the magnetism-sensing section, and a non-magnetic protective layer provided on that surface of the oxide layer which faces away from the low-resistance metal layer.

Therefore, *Carey* fails to disclose or suggest claims 1 and 10.

Claims 2, 3, 8, 11, 12, and 17 depend directly or indirectly from claim 1 or 10 and are therefore allowable for at least the same reasons that claims 1 and 10 are allowable.

Applicant respectfully submits the rejection has been overcome and requests that it be withdrawn.

B.) Rejection of claims 4-7 and 13-16 under 35 U.S.C. §103(a) as allegedly being unpatentable over *Carey, et al.*:

Applicant respectfully disagrees with the rejection.

Applicant respectfully notes the Examiner mistakenly rejected claims 6 and 15, which have been canceled.

Independent claims 1 and 10 are allowable over *Carey* as discussed above. Claims 4 and 13 depend directly or indirectly from claim 1 or 10 and are therefore allowable for at least the same reasons that claims 1 and 10 are allowable.

Claims 5, 7, 14, and 16 have been canceled.

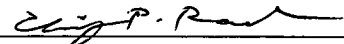
Applicant respectfully submits the rejection has been overcome and requests that it be withdrawn.

CONCLUSION

In view of the foregoing, Applicant submits that the application is in condition for allowance. Notice to that effect is requested.

Respectfully submitted,

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